



SOCIETY OF ACTUARIES

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## PENSION ACCOUNTING COMMITTEE REPORT TO SOCIETY

by Frank L. Griffin, Jr.

The Society's Special Committee to Study Pension Accounting was appointed in 1960. The American Institute of Certified Public Accountants (AICPA) studied, evaluated, and compared various proposals for a consistent approach to accounting for pension costs. The Society Committee was to cooperate with the Accounting Principles Board's Subcommittee on Pensions and the research staff of the AICPA in exploring actuarial aspects of the pension accounting question and in making actuarial counsel available. One of the Committee's objectives was to ensure that responsibilities falling in the province of the actuary were properly reserved to the actuary.

A final study (the "Hicks Report", reviewed in TSA XVII, 575), was issued in 1965. The Accounting Principles Board then drafted an Opinion designed to furnish guidelines for the proper charging of pension costs in corporate financial statements. This was discussed with various interested groups, including actuaries, and was issued in final form in November, 1966 as APB Opinion No. 8.

Until the issuance of Opinion No. 8, accounting for the costs of pension plans was in most instances done on a cash rather than on an accrual basis. Since the prevailing practice in the United States prior to 1967 was for pension accounting to follow actual contributions, there was a widely varying incidence of pension charges from year to year. There was also a lack of comparability between companies.

A company with a funded plan might contribute any amount within the wide limits acceptable to the Internal Revenue Service. A company with an unfunded plan, while not having that flexibility, might initially have insignificant costs but be faced with the prospect of rapidly mounting future costs.

Recognition that wide variations in reported pension costs could result in material distortion of a company's earnings statement aroused the concern of many accountants and of the U.S. Securities and Exchange Commission.

The major requirement of APB Opinion No. 8 is that costs be reported on the accrual basis, regardless of the manner in which contributions are being made for funding purposes, and even if the plan is not being funded at all. Guidelines are given in the form of maximum and minimum pension charges, and it is contemplated that a company will adopt a course for accounting purposes and follow it consistently from year to year.

The new accounting rules cover: the inclusion of unfunded plans within the scope of the Opinion; recognition by some acceptable method of the excess of market over book values of assets; the spreading of actuarial gains and losses; recognition of costs with respect to all employees who may reasonably be expected

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## THE NOD OF RECOGNITION

The following quotation is from President Johnson's Message to the Congress on Civilian and Military Pay Raises (90th Congress, 1st Session, House Document No. 95):

"Our career employees are well-trained and experienced. In ever-increasing numbers, they are skilled professionals. They include not only administrators and managers, but doctors, lawyers, diplomats, economists, scientists, engineers, *actuaries*, systems analysts, law enforcement officers, nurses — and many others critically needed to provide public services in a complex world."

Your editor provided the italics.

## THE OPTIMUM USE OF RISK CAPITAL

by Irving Rosenthal

Most experienced actuaries use the concept which furnishes the title of this brief article in a rather instinctive fashion. It is a blurry concept which is not easy to bring into focus.

For the limited purposes of this article risk capital may be defined in oversimplified fashion as just plain old capital and surplus. In similar fashion its use may be described as that of a financial shock-absorber. We may, perhaps, agree that we make optimum use of risk capital when we find ways and means not only of preserving it but of providing for its most intensive use and its most rapid rate of expansion. This is both concrete enough to suggest the meaning of the terms used and abstract enough to permit a wide range of opinion as to how optimum use of risk capital should be precisely defined.

The author of a recent article on the European casualty reinsurance market remarked, and not too facetiously, that in view of persistent underwriting losses, perhaps the best way to preserve and expand the capital invested in the casualty insurance business was to stop writing insurance altogether and just accumulate investment income on capital and surplus. This is one extreme answer to the optimization problem — just turn the risk capital into non-risk capital!

There is a special extreme answer popular among some of our life company actuarial colleagues. They observe, with all the benefit of hindsight, that life reinsurers have in the past made substantial profits on the accounts of ceding companies, at least the companies with which these actuaries are acquainted. Had these ceding companies kept all the business they reinsured, they, and not the reinsurers, would have made the

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**Risk Capital . . .***(Continued from page 1)*

profit. Ergo, the way to optimize the use of risk capital is to risk it more, right up to the point of eliminating reinsurance altogether.

Consider a hypothetical situation. Imagine that Company X has enough capital and surplus, and is sufficiently unconcerned about the inconveniences of fluctuation in its claim experience to justify, in the judgment of its management, the establishment of a \$500,000 limit of retention for individual life insurance policies. The management of Company X however, believes that in the existing market situation, characterized by very competitive underwriting for large size policies, the underwriting profit on policies of over \$100,000 will be well below average. They decide therefore, to set a limit of retention of \$100,000 on individual policies. They expect that their reinsurer will make a profit on the reinsured business and that the profits will be shared with them by way of an experience refund arrangement. We may now ask: Is this a rational decision?

It could mean that a portion of Company X's risk capital, the portion released by the decision to use \$100,000 instead of \$500,000 as the limit of retention, is to remain unemployed. If employed, it would have had the prospect of yielding the profits which Company X expects the reinsurer to earn on that portion of the individual policies which fall between the \$100,000 and \$500,000 limits. To leave it unemployed would be an irrational decision.

But suppose that Company X is considering an expansion in its overall business activity by starting an individual

**Gray . . .***(Continued from page 2)*

claim it as a deduction from his income. However, on his death it will be assumed that his family-unit has had a mortality gain on which income tax must be paid out of his estate. If the proceeds are left to some person outside the unit which paid the premiums, the proceeds are taxable income to such person as well.

Thus we see in the proposals for annuities and insurance a complete refusal to accept the idea of risk sharing by insurance. Each policyholder is to have his own personal profit or loss, and is to be taxed on it.

health line or a group insurance line, or by expanding its life insurance sales to military personnel, or by expanding abroad. It intends to employ the risk capital released by a lower individual limit of retention as part of the risk capital assigned to these new ventures and it expects to make bigger and more stable profits on these new ventures than it can make by insuring the portion of large life insurance policies which fall between the \$100,000 and \$500,000 limits. Under these circumstances, and granting the validity of all of Company X's subjective opinions about the relative sizes and stabilities of the profit potentials of different insurance ventures, its decision to limit its life policy retention to \$100,000 is a rational one. It has been made by considering all the elements relevant to a proper decision. The decision may be a wrong one in a practical sense because the company's judgment about relative profitabilities may have been all wrong. All that we wish to assert here is that it is a rational decision.

Now let us consider the rationality of the decision of the reinsurance company which is going to reinsure Company X's business. In the first place, the reinsurance company may well disagree with Company X's estimate as to the profitability of large insurance policies. It may have more confidence in Company X's underwriting ability and in the quality of its agency sources of business than Company X itself has. It may have less concern about the basic soundness of the market situation, about the harmfulness of competitive underwriting, for instance. It may have a lot of confidence in its own ability to underwrite risks submitted facultatively, and its ability to guide Company X in that company's underwriting of risks submitted automatically. Above all it may have a lot more capital than Company X (particularly when its retrocession facilities are taken into account) and hence a lot more capacity to absorb unfavorable fluctuations and a lot more financial support for an optimistic view of the future.

In addition, the reinsurer may not have the prospects for alternative uses of risk capital which are available to Company X. It may be committed by reason of its organizational structure and by reason of the instructions or expectations of its Board of Directors and

**Actuaries Club Meeting:**

June 15-16, Southeast Actuaries Club,  
New Orleans, Louisiana

June 21, Seattle Actuarial Club,  
Olympia, Washington

stockholders to the most intensive use of its risk capital in the reinsurance of business submitted by companies like Company X. To turn up its nose at segments of this business may mean underutilization of its risk capital and a lower than maximum or optimum profit yield. That would be an irrational decision, especially since Company X could well conclude that another reinsurer might give it better overall service.

In the light of these examples it is possible to improve somewhat on our earlier statement and make a more definite one, but one which is still quite vague, about what the optimum use of risk capital means. It involves, certainly, the idea that one strikes a balance, somehow or other, with such help from statistical theory and facts as one has the knowledge and courage to use, between conflicting desires for maximum long term profit and minimum short term loss. Our tantalizing concept also involves the possibility that as the exposure of capital in a given insurance employment increases it may produce some form or other of diminishing returns. This suggests that a skillful rationing of one's risk capital among the available alternative insurance employments is needed to achieve an optimum result.

**Griffin . . .***(Continued from page 1)*

ed to become participants after completion of a waiting period; and disclosure of pertinent facts about the plan in footnotes to the company's annual statement. The Opinion also discusses actuarial cost methods and states that the pay-as-you-go and terminal funding approaches are not acceptable for the determination of accounting charges.

The Opinion recognizes that computation of pension costs requires the use of actuarial techniques and judgment and that pension costs should be determined by an actuary. While the Opinion sets forth some actuarial concepts in order to describe accounting for pension costs and for the information of the account-

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